

Joan M. Hawkinson

Special Education Consultation Inservice Administrative Leadership Services

August 25, 2008

Gregg M. Ushiroda
Watanabe, Ing
First Hawaiian Center
99 Bishop Street, 23rd Floor
Honolulu, Hawaii, 96813

RE: Michelle H.
DOB: 02/15/94
Natalie H.
DOB: 08/03/92

Dear Mr. Ushiroda:

The purpose of this correspondence is to convey my findings and opinions in regards to Michelle and Natalie H. as to whether the girls were provided an education to meet their individual educational needs as adequately as the needs of students without disabilities are met as required under Section 504.

The focus of this report is to address the education provided to Michelle H. and Natalie H. from the 1994/95 through the 1999/00 school years with respect to whether their education was provided in accordance with the standards for a free appropriate public education (FAPE) as defined in Section 504 of the Rehabilitation Act of 1973 (504). During this time period Michelle and Natalie were each served as a child with a disability under the Education of the Handicapped Act (EHA) and later reauthorized as the Individuals with Disabilities Education Act (IDEA).

There is a significant difference between an educational program under 504 and IDEA. IDEA requires that the individual educational program (IEP) be designed to meet the unique education needs of the individual child beyond what is offered to nondisabled children so as to enable the child to have the opportunity to receive educational benefit. 504 requires reasonable accommodations that are designed to meet the disabled child's educational needs to the same degree or as adequately as the needs of nondisabled children are met without changing the intent or purpose of the regular education program/s.

Analysis and Conclusion

As mentioned above the standard under 504 references the thought that reasonable accommodations need to be provided for the purposes of providing equal access to the regular education programs and those curriculums. This report is based on a seven hour

observation of Michelle in the school and community environments on May 20, 2008. An observation of Natalie's full school day on May 21, 2008 and an observation of Michelle and Natalie was also conducted for the duration of their after school program on May 21, 2008. This analysis is also based on a review of case records and reports. The records reviewed included evaluations, IEPs, depositions and due process transcripts and decisions. Video tapes/CDs of the girls from 7/14/00, 4/12/01, 4/9/03, 6/3/03, 11/12/03, Dr. Dan #1 & #2 were also reviewed. The focus of this report is to review the design and effect of the individual education program for each girl.

Michelle began school as a preschool age child identified as a child with a disability under Part B of IDEA in July of 1994. Natalie began school as a preschool age child under the same circumstances in July of 1995. In the State of Hawaii during the time frame from 1994/95 through the 1999/00 school years there was no regular education preschool program available for the general population of preschool age children. Michelle was served as a child with a disability in need of special education under Part B of IDEA as a preschool age child from July of 1994 through the end of the 1995/96 school year. Natalie was served under the same circumstances as a preschool age child from July 1995 through the end of the 1996/97 school year. As a result Michelle and Natalie were not denied access to public school education that was designed to be comparable to that of nondisabled children, for public school education did not exist for children without disabilities in this age range.

The Hawaii Department of Education has a public school State established program beginning at the kindergarten level. The IEPs for Michelle from the 1996/97 through the 1999/00 school years and IEPs for Natalie from the 1997/98 through the 1999/00 school years are applicable with respect to 504.

As a matter of background it is important to emphasize that Michelle and Natalie have received public school education in the State of Hawaii as children identified with disabilities in need of special education under IDEA throughout their public school education. Michelle was identified as a child with a disability through the multidisciplinary team process under Part B of IDEA in 1994 and provided services under an IEP per IDEA from that date forward. Natalie was identified as a child with a disability through the multidisciplinary team process under Part B of IDEA in 1995 and was provided services under an IEP per IDEA from that date forward. During the time frame from 1994/95 through the 1999/00 school years Michelle was between the ages of three through nine and Natalie was between the ages of three through seven. Evaluation documents on Michelle and Natalie report both girls as having moderate to severe impairments in the areas of communication, socialization, adaptive skills, and behavior with diagnoses of Autistic Disorder and Mental Retardation for both girls.

Based on the analysis of Michelle's and Natalie's evaluations and IEPs, charts were developed that indicate educational growth under broad headings for Michelle and Natalie. The charts accompany this report and highlight skill development the girls evidenced from the 1994/95 through 1999/00 school years. The charts clearly demonstrate that growth and educational benefit was provided to Michelle and Natalie during this time frame. Review of the chart for Michelle and Natalie allows one to examine progress in skill areas over time. The skill areas on the left side of the chart are in a hierarchy of complexity from the most simple at the top to more complex skills as one goes down the left column margin under the broad headings.

Michelle began her school career with many ritualistic, avoidance, non-responsive behaviors and attachment to objects that interfered significantly with her learning. At this time it was not clear as to how much language she understood. To ensure that Michelle evidenced learning despite these significant difficulties, instruction needed to employ drill and practice of logically sequenced tasks that emphasized using visual materials and concrete experiences with limited or simple explanations. Routines needed to be established to assist in reducing her interfering behaviors and assist Michelle in accomplishing tasks. Review of Michelle's chart starts with the skills she evidenced at the end of the 1st IEP that was developed for her in 1994. The chart highlights the progress she made related to the board headings of academic, adaptive and language skills. Under academics at the end of the 1st IEP it is noted that she could match pairs of objects, could discriminate colors and complete a 26 piece non-insert puzzle, could rote count to ten and use crayons to scribble and color. In the area of adaptive skills she could put on a shirt with buttons with assistance, was indicating a need to use the toilet, washed and rinsed her hands, walked in line, followed established routines fairly well, and stayed seated for a circle time and lunch. In the area of language as a three year old her vocalizations were meaningless except for saying "na" which was interpreted as meaning no and saying "he-he-he" that was interpreted to mean she was pleased with something. By the end of the 1994 IEP she was using gestures, vocalizations and some sign to express her needs and wants. She was making eye contact more consistently, looked at the speaker when her name was called and responded appropriately when told "no". She understood the temporal concept of this first, then that. Much of her language by the end of the first IEP served a purpose. By the end of the second IEP that was developed for her in 1996 she had mastered sorting by color and dissimilar objects, computed complex non-insert puzzles, glued independently to a glue spot, was able to cut within a three inch space. She could cut along a five inch line and imitated making a line, circle and cross to model. Her program continued to work with her on dressing herself, choosing to use a fork or spoon to eat without prompts and brushing her teeth independent of assistance. She was demonstrating a lesser need for prompts or assistance to follow the toileting routine. Her language program continued to practice language skills she had evidenced making progress towards at the end of the IEP that was developed in 1994. At the end of the 1995 IEP she increased her willingness to interact in play activities with the speech and language pathologist and used sounds and jargon during those sessions. As one moves along the chart one can clearly see that Michelle was making progress on an annual basis. The review of records clearly indicates that at the core of Michelle's significant difficulties to learn are the interfering behaviors, communication and cognitive factors of her disabilities. As the interfering behaviors were decreased it becomes apparent that the disabling conditions of communication deficits and cognitive deficits become the factors that pose the greatest impact on her rate of skill acquisition. In addition, as the complexity of tasks increase requiring higher levels of language and cognitive skills slower rates of growth would be expected and this is apparent.

Review of Natalie's chart starts with the skills she evidenced at the end of her 1st IEP that was developed in 1995. The chart highlights the progress she made related to academic, adaptive and language skills. Under academics at the end of the 1st IEP it is noted that she was sorting up to five colors independently, building a seven to nine block tower and stacked two to three one inch cubes. In the area of adaptive skills she held a spoon while being assisted to scoop food and bring it to her mouth. She was able to

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take off a pull over shirt and take off a pull down garment with assistance. She could perform a hand washing routine. She released a ball off to the side when directed to imitate rolling the ball to the person in a reciprocal play activity. In the area of language she vocalized constantly using her own jargon during speech sessions but would not yet imitate words. She followed simple verbal directions such as pick up play dough. By the end of her second IEP that was developed in 1996 she was able to match colors and shapes. She could string one inch beads and completed a four to six piece inset puzzle. She scribbled without going off the paper and held paper while making snips in the paper with scissors. She counted to ten (said numbers 1-10) and said alphabet letters (A,B,C,D,E,F,G). Her adaptive skills increased in that she could scoop or pierce food with utensils independent of assists. She followed a toileting routine of pulling pants down and sitting on toilet with one prompt. Natalie carried her tray in the cafeteria and emptied her tray with assistance. She removed shoes, socks, shirt and pants with one prompt most of the time. She transitioned from one activity to another. In the area of language she continued to communicate most of the time by taking someone's hand and putting it on what she wanted or pulled the person to where she wanted to go. She was saying words and word phrases such as "stop", "go away", "outside", "shi-shi", "what is it". She turned her head towards the direction of the person when her name was called. When presented with one to two objects Natalie demonstrated progress towards choosing the object requested in half of the trials presented. As one moves along the chart progress is noted on an annual basis. The review of records clearly indicates that at the core of Natalie's significant difficulties to learn were initially her resistive behaviors and stereotypical behaviors as well as the communication and cognitive factors of her disabilities. Similar to Michelle, as Natalie's behaviors have decreased, the communication and cognitive factors of her disabilities continue to pose the greatest impact on the rate at which she is able to acquire skills especially when those skills require an increased understanding and use of language and higher cognition. As Natalie is expected to complete more complex tasks that require higher levels of language and cognitive skills slower rates of growth would be expected and this is apparent.

For purposes of demonstrating comparability the performance charts detail skill areas of instruction for Michelle and Natalie that correlate to the kinds of instructional curriculum offered to nondisabled children in elementary school. Language arts, number skills, communication, social skills, self help and personal care skills were the focus of these girls special education program during these school years. The design of the individual education program addresses the individual educational needs of each girl based on how their disabilities impacted their learning. The standard for 504 is that reasonable accommodations be provided so as to enable a disabled child to have access to the regular curriculum so as meet the needs of the child at least as adequately as the needs of nondisabled children are met in the regular education curriculum. The charts demonstrate that these girls progressed toward skill objectives as outlined in their respective individual education programs from year to year and therefore were receiving educational benefit. Based on the direct observations of these two girls in May of 2008, eight years after the 1999/00 IEPs, their progress is being maintained and advanced, with definite progress noted. Michelle and Natalie's individual education programs are comprehensive and address functional academic skills, recreation & leisure, community experiences and functions, and daily living skills to increase functional independence and tasks commonly associated with supported living and employment. Michelle continues to attain functional reading skills including reading simple directions. She demonstrates following those directions with prompts. She has learned conversational

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scripts and utilizes those scripts in social contexts. Greetings were observed to be independent while others were prompted when the appropriate social context occurred. She follows learned routine tasks as indicated on a visual schedule or verbally prompted. Her attention was observed to be easily directed as well as her repetitive actions. She readily transitions from activity to activity. She was observed to be attentive during a game activity and infrequently needed prompts as to when it was her turn. More often than not she was able to carry out the first and second step of the action without prompts. She is able to identify environments and locate the women's restroom at the mall where she was observed. She was observed to use a safe street crossing routine of turning her head from left, right, left, but needed to be prompted as to whether it was safe to cross the street. She demonstrated responding to questions she had practiced and/or were part of a familiar routine. She performs shopping, banking, and eating out routines. If the routine is disrupted by persons talking to her during the routine or the environment is changed she is unable to determine what to do next and stops at the step in the routine where the interruption or change occurred. A prompt or assistance is needed for her to be able to reinstate the routine to complete the task.

Natalie's spontaneous speech consists of functional words or phrases. She used spontaneous speech primarily to get her needs met or to tell her instructor that she completed the assigned task. During the observation she demonstrated following one step directions for an unfamiliar activity after being prompted. Minimal repetitive behaviors were noted during the observation. Repetitive behaviors were observed to most often occur when she was confronted with the expectation of performing each step of a novel task or when other students exhibited emotions of anger, or sadness. She is working on a cursive first and last name signature. She prints legibly from a model. She attends to a group instructional lesson. She stood up when a question was directed at her and looked back with a questioning expression at her personal instructor. Her personal instructor assisted her with prompts as to what to provide for an answer. Michelle and Natalie are girls with disabilities that significantly interfere with their learning. However the design of each girl's special education program has provided educational opportunities relevant to their individual needs with noted progress annually.

IDEA addresses the needs of a child with a disability through development of an IEP that can substantially alter or even replace the content of the educational program that is offered to children without disabilities. The standard in 504 is to enable the child to be educated as adequately as nondisabled students are educated, without a requirement for educational benefit as an expected outcome. The difference between 504 and IDEA are substantial for the nature and extent of Michelle's disability as well as Natalie's requires significant alterations of the regular education program that goes beyond the standards in 504. Michelle and Natalie both exhibit severe disabilities regardless of the treatment strategies employed and require replacement curriculum which substantially modifies the curriculum content beyond mere accommodation of that content. During the 1994/95 through the 1999/00 school years these girls were in preschool and elementary school special education programs. The comparable regular education curriculum for children without disabilities in these school years addresses language arts, mathematics, social studies, art, music, science, physical education and health. These subject areas were similarly addressed for Michelle and Natalie with regard to their disability and the need to focus special education to address their levels of functioning and to advance their skills so as to enable them to have the opportunity to productively participate in society. Their programming not only met the comparability standard but evidence of progress from year to year on targeted skill areas that were the focus of their special

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education program indicates that they did make progress and received educational benefit.

Dr. Bateman refers to an "autism-specific program" that needed to be delivered within a specified timeframe of a child's life. However she never goes on to explain what an "autism-specific program" is and why the timeframe in which the services are delivered is necessary. Dr. Bateman appears to take the position that comparable design must be defined in a very narrow framework referred to as an "autism-specific program." She seems to advocate that the only evidence of comparable or appropriate design is faithful adherence to a doctrine of methodology which she is advocating and that comparable design is conditional to strict adherence to a specific treatment plan that must be applied with fidelity and diligence during a specific time frame. She further implies that failure to strictly apply the desired methodology at a particular point in time and with the required intensity results in permanent, irreversible loss of skills. The proponents of this position advocate that any unexplained lack of improvement in rate of growth is solely determined by the fidelity of the implementation of the treatment model that is advocated. Success is validation of the treatment model and failure or lack of progress is validation of the failure to implement the treatment model with sufficient rigor and fidelity. Such an argument is failure proof. Under such a structure the concept of a life long, permanent disability does not exist. Under such a structure the condition of a permanent mental disability is only attributable to the inadequacy of the design of the programming or fidelity of the implementation of the programming and nothing to do with the innate nature of a disability having a permanent, life long impact on the functional capacity of the individual. If a treatment model existed, that if faithfully implemented, could reverse the disabling affects of a disability for all children for whom it was applied it would be practiced universally through out the world verses the subject of debate in court rooms.

The progress in basic skills, coping skills and adaptive behavior that these two girls made during the first six school years studied attest to a design that was targeted to address their needs. They made progress year to year. Each subsequent year built on the progress made the year before. To assert that the design was inadequate, not comparable or discriminatory or constituted deliberate indifference would have to deny that these children made progress year to year which is not supported by the facts and the records. One would have to further contend that based on that denial of the facts that real progress was made during those first six years that continued progress observed and witnessed by this author in May of 2008 for these girls did not exist either. To make such an assertion denies reality, ignores the record and the facts and distorts the purpose of special education for Michelle & Natalie.

Sincerely:



Joan M. Hawkinson

Michelle H	End of 1994 IEP	End of 1995 IEP	End of 1996 IEP	End of 1997 IEP	End of 1998 IEP	End of 1999 IEP
Academic						
<i>Reading</i>						
Sorts by Colors & Shapes						
Place All 26 Alphabet Letters in Insert Puzzle						
Puts Together Puzzle of United States (non-insert)						
Sorts Colors & Dissimilar Objects						
Compute Complex Non-Insert Puzzles						
Sorts Similar Objects						
Matches Uppercase Letters of the Alphabet						
Matches Lowercase Letters of the Alphabet						
Matches Food & Body Part Words with Corresponding Pictures						
Associates Printed Sentence with Illustration on Same Page						
<i>Math</i>						
Role Count to Ten						
Counts Correct Number of Objects to Match Number Symbol						
Recognizes Numbers Up to 30 in Any Order						
Recognizes Numbers Up to 50 When Numbers are Presented in						
<i>Fine Motor</i>						
Scribbles & Colors						
Glues Independently to Glue Spot						
Holds Scissors						
Coloring Within a 3" Space - Cutting Along a 5" Line - Initiating Four Strokes Much of the Time						
Traces with Template						
With Assistance Traces Shapes - Triangle, Diamond						
Traces Name Independently - Traces Curved or Linear Shapes & Colors within the Area						
<i>Feeding</i>						
Can Use a Fork & Spoon (Continues to Prefer Using Fingers)						
Eats Independently						
<i>Dressing</i>						
Independently Removes Clothes - Needs Assistance to Put Clothes on Demonstrating Little Resistance						
Dresses Independently						
<i>Hygiene</i>						
Brushes Teeth with Assistance						
Brushes Teeth Independently Most of the Time						
<i>Toileting</i>						
Brushes Teeth Independently						
Indicates Need to Toilet (Not Consistent) Urinates & Defecates in Toilet						
Follows Toileting Routine (pants down, sit, flush pants up, wash, dry hands) School						
Toileting Routine (pants down, sit, flush pants up, wash, dry hands) Not Completely Independent						
Independent Toileting (supervised)						
<i>Attending - Social - Behavior</i>						
Attends to an Activity for a Sustained Period of Time						
Mimics Actions During Activities						
Follows Routines Most of the Time						
Sits & Attends for Group Activities Most of the Time (with adult proximity provided)						
Shows More Interest in Other Children - Plays within Proximity						
Decrease in Ritualistic or Resistive Behaviors						
Decrease in Behaviors During Transitions or Changes in Routines						
Looks at Person Speaking to Her Across Various Persons Much of the Time						
<i>Interacting</i>						
Increased Eye Contact						
Looks at Speaker When Name is Called						
Responds Appropriately to the Word "No"						
Uses Gestures, Vocalizations & Sign to Express Needs & Wants						
Makes Choice Between Two Foods Much of the Time						
Understands First Do This - Then You Get to Do That						
More Often Than Not Looks at Picture Cards When Named Does Not Identify Verbally, Uses Jargon & Sounds - Speech Play Activities						
Signs & Says "Please"						
Responds Appropriately to Social Greetings "Hi" "Goodbye"						
Verbally Labels Pictures						
Makes Verbal Requests "I want to eat" "I want to go shi-shi"						
Evidences Responding to Social Greetings						
Initiates All or Most Nouns & Verbs Modeled Frequently Responds with an Appropriate Label to a Picture						

Natalie H		End of 1995 IEP	End of 1996 IEP	End of 1997 IEP	End of 1998 IEP	End of 1999 IEP
ACADEMIC						
Reading						
Sorts Five Colors Independently						
Stacks Two-Three Inch Cubes						
Builds 7-9 Block Tower						
Matches Colors & Shapes						
Completes 4-6 Piece Insert Puzzle Much of the Time						
Matches Picture to Picture or Picture to Object Much of the Time						
Vocalizes ABC's to Letter G						
Matches & Sorts Lowercase Letters, Colors						
Correctly Sequences Letters When Presented in Random						
When One Puzzle Piece is Presented at a Time Integrates 14-15 Piece Puzzle						
Identifies Some of the Names of the Ten Basic Colors						
Identifies Some of the Names of the Eight Basic Shapes						
Selects Her Name When Presented with Three Distractors						
Points to Most Upper & Lowercase Letters of Alphabet						
Puts the Letters of the Alphabet in Order Most of the Time						
Identifies All Upper & Lowercase Letters of Alphabet						
Recognizes Some Words Such as Number Words						
Math						
Rote Count to Ten						
Matches & Sorts Basic Geometric Shapes & Numbers 1-10						
Correctly Sequences Numbers When Presented in Random 1-10						
Correctly Sequences Numbers When Presented in Random 1-12						
Recognizes Numbers 1-20						
Counts Corresponding Number of Objects (Touch Math)						
Fine Motor						
Scribbles Without Going Off Page Most of the Time						
Writes First Name Without Tracing						
ADAPTIVE						
Feeding						
Scoop Food Bring to Mouth (Assisted)						
Scoops or Pierces Food Independently (Prefers Eating With Fingers)						
Dressing						
Take Off Shirt with Assistance						
Pull Down & Pull Up Garment with Assistance Much of the Time						
Removes Shoes, Socks, Shirt & Pants With One Prompt Most of the Time						
Assists With Dressing by Securely Holding Garments Much of the Time						
Hygiene						
Hand Washing Routine Much of the Time						
Brushing Teeth Routine With Assistance Much of the Time						
Toileting						
Toilet Trained						
Attending - Social						
Reciprocal Play - Will Release Ball Off to the Side						
Makes Eye Contact With Speaker Most of the Time						
Sits For Group Activities for 15 Minutes						
Transitions From One Activity to Another						
Turning Taking Skills in Teacher Lead Structured Play Activities						
Language						
Follows Simple Oral Directions (One Step) Much of the Time						
Responds to Name by Looking in the Direction of the Teacher When She is Motivated						
Makes Choice by Pointing From Two Items Much of the Time						
Vocalizes Picture Name When Shown Much of the Time						
Vocalizes Name of Common Object When Handling the Object (cup, ball, etc.) Much of the Time						
Spontaneously Vocalizes Words or Phrases (ie., No, Tickle, Stop, Go Away, Outside Sh-Shi)						
Signs "More Please"						
Vocalizes the Word "No" at Appropriate Times						

S.P.E.C.I.A.L.S. LLC
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April 23, 2004

Randall Y. Yamamoto
Watanabe, Ing, Kawashima & Komeiji LLP
999 Bishop Street 23rd Floor
Honolulu, Hawaii 96813-4423

Dear Mr. Yamamoto:

Enclosed please find the report as per your request relative to Natalie and Michelle
[REDACTED] This letter and report is being sent via email and US mail.

If you have any questions, please feel free to contact me.

Sincerely

Joan M. Hawkinson

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Preface

ISSUES UNDER CONSIDERATION:

- 1) Did the failure to provide specific methodology result in irrevocable harm to Natalie & Michelle?
- 2) Did the failure to provide the desired services within a specific timeframe result in irrevocable harm to Natalie & Michelle?
- 3) Did failure to follow technical procedures under IDEA constitute or result in irrevocable harm to Natalie & Michelle?

Review and clarification:

The plaintiffs claim in this case is that the school district failed to provide an appropriate individual education program for Natalie and Michelle and as a result these children were permanently harmed due to that error. The argument is that the children were harmed because the school failed to provide services at an appropriate level termed "intensive" using a specific methodology and as a result the children's cognitive and social development was permanently and irrecoverably damaged. The claim put forward is that if this particular methodology was used at an "intensive" level the children would have increased their cognitive and social skills to the point that perhaps they would no longer need special education services and in effect be normal. As a result of this failure alone the children will exhibit autistic characteristics at a level that equates to life long cognitive, social, and adaptive and communication skills delays. Further more the argument is put forward that because the school failed to provide this programming in the time frame of when the children were in their preschool years that the effect of this failure to provide the desired methodology is magnified and as a result the impact of this failure on the children's development is compounded in geometric proportions. Finally the allegation put forward is that the technical errors in the IEP's for Natalie and Michelle for the years 1994 through 1999 were of such significance that the technical errors substantiate the alleged irrevocable damage to these two girls.

Documents Reviewed

Re: Michelle [REDACTED]:

1. 05/03/94 Report by Margaret Koven, Psy.D. (01465-01468)
2. 05/05/94 Case Conference Summary (00044-00069)
3. 07/18/94 IEP Addendum to Conference on 07/11/94 (HM0039-00050)
4. 02/19/95 Consultation Report by Brian O'Hara M.D. (01488-01490)
5. 06/29/95 IEP (01507-01519)
6. 01/11/96 IEP (01524-01538)
7. 12/02/96 Straub Sub-Clinical Notes (01541-01543)
8. 01/16/97 IEP (01551-01564)
9. 04/03/97 Case Conference Summary (01565-01584)
10. 04/03/97 Case Conference Summary Reevaluation by Charlene S. McGraw, M.A. (00011-00020)
11. 01/16/98 IEP (01590-01607)
12. 12/18/98 Child Psychiatric Evaluation by William M Bolman, M.D. (01029-01030)
13. 01/21/99 IEP (01608-01624)
14. 12/08/99 Case Conference Summary by Adiadne Weaver and Eric Moto (00001-00007)
15. 04/25/00 Child Psychiatry Progress Note by William > Bolman, M.D. (01096)
16. 11/19/2001 IEP (H001306-H001356)
17. 11/15/02, 09/11/02 IEP (H001262-H001305)
18. 07/10/03 Outpatient Consultation by Cathrine Critz, Ph.D
19. 11/06/03 IEP (H007930-H008045)

Re: Natalie [REDACTED]:

1. 06/30/94 IFSP (00579-00583)
2. 09/06/94 Psychological Evaluation by Joyce Pobanz, Ph.D. (00314-00318)
3. 09/21/94 Leeward Diagnostic Unit conference Summary by Louise Iwaisha M.D. (00319-00324)
4. 02/08/95 Consultation Report Brian O'Hara M.D. (00308-00310)
5. 05/22/95 Psychological Evaluation by Melanie Ching, M.A. (00348-00351)
6. 07/07/95 IEP (00047-00057)
7. 07/07/95 Special Education Teacher Report Form by Carey Akamine (00425-00430)
8. 02/13/97 IEP (00409-00421)
9. 11/26/97 School Social Work Report Reevaluation by Diana Trichilo, M.A. and Linda Fox, Ph. D. (00458-00471)
10. 02/13/98 IEP (00433-00448)

Re: Natalie [REDACTED]: *(continued)*

11. 03/04/98 Case Conference Summary Reevaluation (00454-00457)
12. 03/06/98 Evaluation Report (00476-00477)
13. 02/08/99 IEP (01892-01919)
14. 02/28/99 IEP Conference Notes (1625-1627)
15. 03/12/01 Child Development Report by Catharine Critz Ph.D. (Exhibit D)
16. 01/31/02 IEP (001188-001228)
17. 01/17/03 Parent Notice (008126)
18. 05/19/03,01/17/03 IEP (001229-001261)
19. 05/19/03 Meeting Information & Notes (008123)
20. 06/03/03,5/19/03,01/17/03 IEP (008046-008065)
21. 06/03/03 Meeting Information & Notes (008124)
22. 06/03/03 IEP (008066-008078)
23. 06/03/03 ESY Report (008127-008130)
24. 06/03/03 IEP Progress Report (008079-0088122)
25. 07/10/03 Consultation Report by Catharine Critz Ph.D. (Exhibit D)
26. 02/05/04 Parent Notice (008125)
27. 02/05/04 IEP (008131-008198)

Re: Michelle & Natalie [REDACTED]:

1. 09/28/99 Ali'iolani Elementary School IEP Conference Notes Re: Michelle & Natalie H. (01625-01627)
2. 01/19/00 Natalie & Michelle [REDACTED] vs Dept. of Education (hearing) "Vol. II" 1-19-00 (pages 208-456)
3. 01/31/00 Decision and Order, Hearing Officer Jeanne B. Conner(00710-00736)
4. 01/29/01 Report by Barbara Bateman, Ph.D., J.D.
5. 03/29/01 Letter to Stan Levin, Esq. by Bryna Siegel, Ph.D.
6. 06/20/03 Report by Barbara Bateman, Ph.D., J.D.
7. 07/07/03 Report by Daniel B. LeGoff, Ph.D. (Exhibit H)

Factual Summary

Issue I:

Did the failure to provide specific methodology result in irrevocable harm to Natalie & Michelle?

Review of Literature

Behavioral intervention is one of the predominant treatment approaches for promoting social, adaptive and behavioral functioning of children and adults with autism. One of the primary individuals of influence in this area is Ivar Lovaas who began his work in UCLA in the 1950's. In his early days he was widely criticized for advocating the use of aversive stimuli with mentally disabled children, claiming that use of this approach resulted in significant increases in intellectual functioning of these children. His most widely recognized work was "The Me Book" (Lovaas 1981) which no longer advocated the use of aversive treatment to "treat" mental retardation. The concept advocated was to provide high numbers of hours of weekly intensive behavioral intervention that consists of 40 or more hours per week as being the most effective way to improve skill levels, cognitive and social functioning, and decrease self stimulatory behaviors in autistic children. He described his methodology as "Intensive Behavioral Intervention" (IBI) which was based on Applied Behavioral Analysis (ABA). Lovaas's approach uses what is known as Discrete Trial Teaching (DTT) as the teaching component of IBI. DDT is the practice of taking a larger skill and task analyzing so as to break it down into smaller steps. This instructional method teaches the isolated steps it takes to complete a larger skill activity such as washing hands or unpacking a backpack. The isolated steps of the skill are then taught through repetition of drills and practice. The use of positive reinforcement is an important component that is used to motivate the child to perform the task. The contention is that after many trials the behavior will be shaped to perform the skill when the stimulus is presented independent of prompts and reinforcers. Lovaas contended that the younger the child, the greater the likelihood that learning would be generalized. He reports that through the use of these methods children with autism can gain in IQ scores by as much as 20 points. His work reports that about half of the children studies are virtually recovered and there was significant improvement in others, (Lovaas, 1987).

The research cited above has served as the foundation for the Lovaas method. The research is highly controversial and has been the subject of debate since its publication.

The Journal of Paediatrics & Child Health, commissioned a study by the Psychosocial Paediatrics Committee of the Canadian Paediatric Society to review the research pertaining to the efficacy of the Lovaas methodology and to summarize and draw conclusions from the research that have reviewed Lovaas's work. Those studies are paraphrased from the report as follows:

Birnbauer & Leach:

The group assignment was not random. The description of the diagnostic process or diagnosis was not rigorous. There was lack of treatment fidelity documentation. After the study all children continued to fall within the spectrum of autism.

Sheinfopf & Siegel:

There was no documentation of diagnostic criteria or treatment integrity. After the study all children continued to fall within the spectrum of autism.

Anderson et al's:

No comparison group was identified. No tests of statistical significance were reported. The expected rate of developmental change was not considered. After the study all children continued to fall within the spectrum of autism.

In conclusion of their review of research the Canadian Paediatric Society commented that there were several deficiencies in the Lovaas study as well. Group assignment was not random, but was instead based on therapist availability. This raises the question of whether the experimental and control groups were equivalent. The study did not compare two different therapies but rather two different levels of intensity of the same treatment, and treatment implementation was inadequately documented. Different assessment tests rather than a uniform assessment protocol was used. In addition, selection IQ criteria may have been too restrictive, resulting in a group with an unusually favorable prognosis. Follow-up measures were limited to IQ and classroom placement. Therefore, the Lovaas study does not meet the criteria for an empirically supported treatment. The results need to be interpreted cautiously. Autism is a lifelong neurobehavioral disorder that requires a differential treatment approached based on the individual. These studies do show a trend towards positive outcomes for some. However there is no research evidence to support the contention that adopting a specific treatment at a specific time is an intervention standard that elicit results of normalcy (Burrows et al, 2004).

In addition to the review by the Canadian Paediatric Society, many other studies on the claims of Lovaas have been reviewed and a few are summarized below.

Boyd and Corley 2001 reported the outcome survey of early intensive behavioral intervention programs for young children with autism in the community setting. Based on both individual case reviews and parent questionnaires, they found that these programs failed to support any instances of "recovery", but yielded a high degree of parental satisfaction. More over, a follow-up inquiry into the type of services each child was receiving in their post early intensive behavioral intervention (EIBI) setting documented continued dependence on extensive educational and related developmental services, suggesting that the promise of future treatment sparing did not materialize. The authors concluded that there is a need for further research designed to document the effectiveness of services provided to young children with autism (Boyd & Corley, 2001).

The Alberta Heritage foundation for Medical Research (AHFMR) evaluated the effectiveness of intensive intervention programs for children with autism. These programs range from strict operant discrimination learning such as Lovaas therapy, utilizing discrete trial training to broader applied behavior analysis such as the Rutgers Program to the more developmentally oriented programs such as the Denver or TEACCH. Each of these programs vary in their intensity from the Lovaas recommended 40 hours a week to a range of 10 to 15 hours a week. The evaluation of the AHFMR was based on reviews by ECRI and the British Columbia Office of Health Technology Assessment (BCOHTA). Two of the critical findings of this assessment are as follows:

- Studies on Lovaas therapy were methodologically flawed. ECRI concluded that Lovaas therapy appears to increase scores on IQ tests and behavioral adaptation, at least in some children with autism. However, given the designs and methodological flaws of the studies, it could not be determined if the changes in IQ and functional parameters could be attributed to the Lovaas Therapy. BCOHTA concluded that the original Lovaas study as well as other follow-up studies were still inadequate to establish the degree to which this form of therapy resulted in "normal" children.
- There is insufficient evidence to establish a relationship between amount (intensity and duration) of any intensive intervention treatment program and outcomes measures (intelligence tests, language development, adaptive behavior tests) (Hartsal, 2001).

ISSUE 1 Opinions and Conclusions

Discussion and Perspective

To summarize the volumes of research on this topic is a daunting task. However a few reasonable and reliable conclusions can be drawn. It is evident that the use of structured behavioral interventions for children with autism is an effective approach in educating many children with autism. Some children can make significant gains in language, social development and a reduction of negative or self abusive behavior. Some of these gains may result in some children spending less time in special education classes in the future. Some children may evidence an increase in IQ scores. There is no evidence that using highly structured behavioral systems, or any other established treatment that is in use today result in children recovering from autism for large or significant segments of the identified population. While early detection of Autism is viewed as important, the tools available for this purpose are not as precise as the test developers seem to claim. Early intervention seems to benefit children but no evidence from any source supports the notion that if intervention is not provided by a specific age that later development is permanently jeopardized, limited, damaged or otherwise not possible.

The author has had extensive experience in developing educational programs for children with significant developmental delays, autism, cognitive disability and emotional/behavioral disability throughout the central part of the state of Wisconsin. In that experience some observations are offered. No method used to educate these children yet discovered, advocated or otherwise promoted cures these conditions.

No one has discovered a cure for cerebral palsy (CP) either yet there are educational practices that reduce the effects of the physical limitations and involvement associated with cerebral palsy. An individual diagnosed with cerebral palsy can be evaluated to determine whether they have athetoid, spastic, ataxic or mixed cerebral palsy. These terms define the type of CP the individual has and the muscle group (s) that limit movement and the type of muscle movement, tone and coordination or control the individual has on those functions given the nature of the physical impairment. The instruments, methods and devices for measuring and determining treatment of the physical involvement are widely recognized as valid, reliable and as a result treatment methodologies are well established. A child who is athetoid receives one set of treatment methodologies and a child who is diagnosed as spastic another. However neither treatment "cures" CP or causes the person to recover from it and function as a "normal" individual without any evidence of residual symptoms of the CP.

The difficulty for parents, teachers, medical professionals and others involved in treating children with developmental delays, autism and cognitive disabilities is that there are no instruments that can probe the brain to indicate precisely what is affecting the child's learning or determine exactly how the child's brain processes stimuli. All tests and measures in place draw inferences from observations. Those inferences are as much art as science. Compared to the preciseness of determining whether a child has athetoid or spastic cerebral palsy, or is deaf or blind, the tests and measures for determining the extent of a child's autism or the nature and dynamics of a child's cognitive disability remain crude. Yet in these fields with many of the new studies whether they are medically or educationally based theories evolve claiming a potential cure. Treatment approaches have evolved and been advocated for with claims to cure the condition or elicit positive results that infer those results will apply to anyone who receives such treatment. Research does not support such a notion. Yet practitioners who adhere to their beliefs will purport that the reasons attributed to less than optimal outcome is due to the onset of treatment, amount or intensity of treatment provided, the training level of the provider or the purity and faithfulness of the treatment. The research pertaining to treatment programs for individuals with autism are often contradictory. If one reads the research from an objective point of view the only conclusion that can be drawn is that no one truly has found a way to measure autism with any degree of accuracy that could at all be regarded valid, reliable and predictable in reference to prescribing a methodology that consistently can be expected to treat the condition with a high degree of predictability.

Some children seem to benefit from behavioral intervention approaches more than others. Observations over the author's years of experience has shown that some children tend to reach a threshold of growth with this methodology and once that threshold is reached further involvement with these approaches has brought forth two observable factors; 1. The child evidences increased levels of negative behavior or avoidance behavior. 2. The child no longer evidences increase in skill development to generalization and independence. In the author's view the factors which are likely coming into play deal with the extent the child may be cognitively disabled or the extent of neurological involvement in reference to how the child's brain is genetically put together processes stimuli and is able to develop compensatory skills.

The value of behavioral interventions, in the author's view, is based on decades of work with these children. Systematic behavioral approaches appear to assist these children in structuring the external stimuli within their mind which enables them to order and process information in a more consistent fashion. It only stands to reason that the extent to which the brain is affected likely dictates the potential benefits of any educationally based treatment method. Another key factor, in the author's view is the compounding level of cognitive delay or mental retardation. If the neurological factors are significant and mental retardation exists then the prognosis for any educational methodology to make any significant impact in the child's capacity to function independently is severely limited. No two children diagnosed with autism are alike. While there are similarities that facilitate the diagnosis and treatment methods that generally elicit improvement in children with autism the effects of the treatment vary from individual to individual. The successfulness of treatment varies as does how the autism affects each child.

The science is not a cure it is a structured process that provides a behavioral change based on reinforcement of the desired behavior. Historically we have not emphasized applying this behavioral science as a standard means of teaching except in extreme cases of behavior. ABA is the applied science of human behavior. It is one way of looking at behavior. It is not the only methodology that has elicited positive results in persons with autism. It has however contributed greatly to effecting behavioral change in replacing less desirable behaviors with more desirable behaviors. It has also provided a systematic teaching process that elicits learning. It is the author's belief that this systematic process provides a foundation from which some autistic individuals are able to use as an underlying structure of how the world works.

Applied Behavioral Analysis (ABA) however does not offer everything to everyone. This is true of any methodology that reports success. An individual's rate of success is dependent on that individual and all the underlying factors that impact the individual and the extent or significance of those factors. While individuals with autism evidence characteristics that substantiate the diagnosis, each and every person that the author has encountered is affected differently and to different degrees.

In the authors personal experience a few examples are offered to provide perspective on this issue. All of the children discussed were served by the author over the past two decades. All children are or were residents of Wisconsin from a variety of communities in rural or urban settings with parents that have varying income levels and educational backgrounds.

Group 1-Received Intensive Behavioral Intervention (IBI) for at least 40 hours a week that began sometime during age 3:

All of these children received at least 40 hours of IBI per week for at least two years. There present status or their status upon leaving the area schools because of moving or graduation is detailed as follows.

One student from a central school district with a K-12 population of approximately 1680 presently served through a special education emotional & behavioral disabilities program with 50% or more of the school day requiring Special Education

One child from a western school district with a K-12 population of approximately 1855 presently served through a special education cognitive disability severe program with 60% of the school day requiring Special Education.

Three students from a small south central school district with a K-12 population of approximately 450 students, each student presently served through a special education cognitive disability severe program with 60% or more of the school day requiring Special Education.

One student from a south central school district with a K-12 population of approximately 675 students served through a special education learning disabilities program with 20% of the school day requiring Special Education.

One student from a central Wisconsin urban school district with a K-12 population of approximately 8759 students presently served through a special education cognitive disability severe program with 90% of the school day requiring Special Education.

One student from south western Wisconsin school district with a population of approximately 2897 students served through a special education emotional & behavioral disabilities program with 60% of the school day requiring Special Education.

One student from east central Wisconsin School district with a population of approximately 1998 students served through a special education specific learning disabilities program for 20% of the school day requiring Special education.

TOTAL = 9 students

Summary:

Two (2) students presently receiving 20% or less of the school day receiving Special Education.

Seven (7) students presently receiving 50% or more of the school day receiving Special Education.

Group 2- Received Intensive Behavioral Intervention (IBI) at least 40 hours a week that began sometime between kindergarten and third grade or age 6-through 9

One student from central Wisconsin School district with a K-12 population of approximately 684 students presently served through a special education cognitive disability severe program with 60% of the school day requiring Special Education.

One student from central Wisconsin school district with a K-12 population of approximately 1789 students served through a special education specific learning disabilities program with 40% of the school day requiring Special Education.

One student from central Wisconsin School district with a K-12 population of approximately 1654 students presently served through a special education emotional & behavioral disabilities program with 20% of the school day requiring Special Education.

TOTAL = 3 students

Summary:

One (1) student presently receiving 20% of the school day requiring Special Education.

One (1) student served with 40% of the school day requiring Special Education.

One (1) student with 60% of the school day requiring Special Education.

Group 3- Received Intensive Behavioral Intervention (IBI) Intensive therapy for 40 hours a week that began sometime during age 12

One student from a west central school district with a K-12 population of approximately 1453 students served through a special education specific learning disabilities program with 40% of the school day requiring Special Education. There was no change in special education services or placement after one year of IBI services.

TOTAL = 1 student

Summary:

One (1) student served with 40 % of the school day requiring Special Education.

Group 4 – Students with autism who did not receive any IBI Intensive therapy

One student from a north central Wisconsin school district with a K-12 population of approximately 1176 students served through a special education cognitive disability severe program with 60% of the school day requiring Special Education.

One student from central Wisconsin school district with a K-12 population of approximately 1987 students served through a special education cognitive disability severe program with 60% of the school day requiring Special Education.

One student from an east central Wisconsin school district with a K-12 population of approximately 769 students served through a special education cognitive disability severe program with 70% of the school day requiring Special Education.

Two students from a north central Wisconsin school district with a K-12 population of approximately 789 students served through a special education cognitive disability severe program with 60% of the school day requiring Special Education.

One student from east central Wisconsin school district with a K-12 population of approximately 1996 students served through a special education specific learning disability program with 20% of the school day requiring Special Education.

Two students from a central Wisconsin school district with a K-12 population of approximately 1875 students served through a special education specific learning disability program both of which currently are served 20% of the school day requiring Special Education.

One student from the school district listed above served through a special education cognitive disability/specific learning disability program with 60% of the school day requiring Special Education.

One student from the same school, brother of the student above dismissed from special education mid year 4th grade.

TOTAL = 10 students

Summary:

One (1) student presently served in regular education and receiving no Special Education services.

Three (3) students receiving 20% or less of the school day requiring Special Education.

Six (6) students with 50% or more of the school day requiring Special Education.

Reviewing the cases detailed above does not confirm the allegation put forward that intensive behavioral intervention (IBI) leads to recovery or even any predictable reduction in special education programming for children. In addition it does not confirm

the claim that early intervention using intensive treatment for 40 or more hours per week for two or more years during the child's pre school or primary years of age results in recovery or any predictable reduction of the need for special education intervention. These cases sighted above from the authors personal experience mirrors the research on this issue. There is no systemic method that once implemented at a particular age yields a predictable and reliable result. There is no method that has the same effect for all children. Advocating that there is a method, if applied at a given age, with a given intensity level yields a predictable result for all autistic children who receive that approach can not be supported.

The author's view is that determining what an autistic child needs to learn is often an overwhelming task. There is no doubt that a behavioral intervention approach should be considered as part of an educational program for an autistic child. However, it is just not a matter of the volume of services or picking one model over another. It is a matter of an on going analysis that determines what areas of learning need to be addressed and continues to provide opportunities for learning that are essential. In general an educational program for these types of children should focus on improving communication, social, academic, behavioral, and daily living skills. The classroom environment should be structured so that the program is consistent and predictable. Most children with autism learn better and are less confused when information is presented visually as well as verbally. Interaction with non-disabled peers is also important, for these students provide models of appropriate language, social, and behavior skills. There is no evidence that one methodology exclusively works better than another for all or even most autistic children. There are a number of instructional methods and educational program arrangements from which some children with autism evidence benefit.

Factual Summary

Issue II:

Did the failure to provide the desired services within a specific timeframe result in irrevocable harm to Natalie & Michelle?

Review of Early Intervention Research:

The other major issue in this case is the claim that the children were irrevocably harmed because the school system failed to provide appropriate services during preschool years and as a result the children lost unrecoverable potential to become normal functioning children.

Gina Green in her 1995 article, stated the following. "Currently, the importance of early diagnosis and treatment is well established amongst diverse groups of professionals (Fenske, et al, 1985; Lovaas 1987; Maurice, 1993; Perry, Cohen & DeCarlo, 1995). For some children with autism, the repeated, active intervention with the physical and social environment that is ensured by intensive behavior analytic treatment may modify their neural circuitry before it goes too much awry, correcting it before autism becomes permanent (Lovaas & Smith, 1989; Cohen, Perry & DeCarlo, 1995.) At this point in time, of course, these are merely plausible speculations that remain to be investigated in scientific studies" (Green, 1995).

The question for the optimal age for intervention was also the subject of review by the Canadian Paediatric Society, "The optimal age for involvement in an early intensive treatment program is unclear. Most published studies that demonstrated treatment efficacy involved children younger than 48 months; Sheinkopf & Siegel (1998), Smith & Groen (2000), Nicolson & Szatmari, (2003), Anderson, Kipietro and Edwards, (1987). One study; Fenske et. al, (1985) compared the outcome of children who entered a comprehensive treatment program at younger than 60 months to a group that started at older than 60 months. The researchers found that 67% of the early treatment group versus 11% of the late treatment group were able to reside at home with parents and attend public school. However there was no pretreatment data reported in this study to ensure that the groups were developmentally equivalent at the start. The question of optimal age for involvement in a comprehensive treatment program requires further examination." (Burrows et al, 2004).

The Canadian Journal of Psychiatry, September 2003 printed an article entitled, "*Autism Spectrum Disorders: Early Detection, Intervention, Education, and Psychopharmacological Management*", Susan E Bryson, PhD, Sally J Rogers, PhD, Eric Fombonne, MD. Portions of the article are quoted to provide the reader with a snapshot of the many variables and unanswered questions that still remain regarding the early detection and optimal treatment for children with Autism.

"Autism has traditionally been viewed as a severe but rare disorder for which little can be done. The dominant view was that autism's causes were psychological and that treatment should necessarily focus on the psychopathological consequences of faulty parenting. This conceptualization of autism began to change in the 1960s, when a handful of innovative thinkers challenged prevailing dogma. In their view, corroborated by a link with epilepsy, autism was a neurological disorder affecting development of the brain and its associated functions...

"With this change in orientation, research efforts began to focus on understanding autism's nature and origins and on identifying effective treatment methods...and evidence for information processing deficits in autism. These deficits included lower-level sensory and perceptual impairments and difficulties in deriving meaning from language. Consistent with evidence of information-processing deficits, was evidence that showed that therapeutic gains were achieved by adopting a pedagogical approach: children with autism learn and develop through structured teaching and the use of positive behavioural principles..."

"With the advent of standardized diagnostic tools, notably the Autism Diagnostic Interview-Revised (ADI-R) and the Autism Diagnostic Observation Schedule-Generic (ADOS-G), expert clinicians are now able to diagnose autism reliably by age 3, and even age 2, years. However, evidence indicates that most children are not diagnosed prior to age 4 years, typically at least 2 years after parents first seek professional advice because they are concerned about their child's development. In the interim before they receive the diagnosis, most children are seen by at least 3 professionals, and parents experience significant distress and frustration. The long delay between parents' initial concerns and eventual diagnosis also postpones appropriate intervention, which, coupled with evidence of its effectiveness, leaves parents with the *sense* (author's italics) that precious time has been lost..."

"What conclusions can we draw from the evidence to date? Clearly, remarkable progress has been made on the complex but important problem of detecting autism earlier in life. Overall, data on existing measures, suggest that sensitivity may be more of a problem than specificity. In other words, high rates of false negatives (vs false positives) may be a particular challenge. An outstanding question is whether there is real variability in the nature and timing of early signs of autism or whether existing instruments are simply constrained by our lack of knowledge of the diversity in signs evident by a particular age. In either case, we need to identify the critical age(s) at which detection is optimal. The task is complicated by the need for instruments that, on the one hand, are developmentally appropriate but, conversely, can be used for young children whose

developmental levels vary widely (that is, who have varying levels of cognitive, emotional, or motivational impairment)." ...

"To summarize, these comparative studies of Lovaas's work, Lovaas's intensive behavioural treatment showed greater group gains in IQ and language than did children in comparison groups, but the studies did not replicate recovery as an outcome of the experimental treatment. Until some study replicates the recovery outcome, it needs to be laid aside in discussions about the effectiveness of early interventions in autism.

"New questions now beg to be addressed. How many hours are needed to get optimum effects, and how should those decisions be made? Is one methodology or teaching approach significantly better than another, when all other variables are controlled? At what is it better? If recovery is not an expected outcome, then what is the most important outcome, social skills, language, tested IQ scores, decreases in autism symptoms, or low levels of maladaptive behavior? To what extent are these independent outcome variables? Adaptive behavior, rather than language and IQ, may be the best indicator of outcome in adulthood; however, follow-up to adulthood takes an entire generation of science."...

"While it is widely recognized that no single program fits all, efforts are increasingly aimed at representing best practices in the socialization and education of children with autism, as derived from the large body of existing research." (Bryson et al., 2003)

A similar review of research with similar views was offered by Gabriels, R., Hill, D., Pierce, R., Rogers, S. J., & Wehner, B., (2001), "Autism is a chronic neurodevelopmental disorder with core deficits in social interactions, social communication, and stereotyped/repetitive behaviors and/or restricted interests. The heterogeneous symptom presentation in this population, ranging from severe global impairments to minor impairments, complicates the scientific and clinical pursuit of identifying predictors of early intervention outcomes. Variability in treatment outcomes for different subgroups of children who have autism (i.e., some children making great progress and others making little, as measured by developmental cognitive ability), regardless of the type and intensity of intervention, complicates the autism outcome research. Although autism intervention research indicates that early intervention can have a positive impact on short- and long-term developmental outcomes, no one type of program has proved superior over another for all children with autism and it is still unknown how to combine and tailor approaches to best impact treatment outcomes."

In Murray's article "Understanding Brain Development and Early Learning" he discussed the work of Lise Eliot from the Chicago School of Medicine. Eliot spoke at the 2002 Cincinnati conference on "Brain Science, Children and the Future of Learning." His article reviews Dr. Eliot's view of the brain's ability to change based on experience which she refers to as brain plasticity. Studies have evidenced that the human brain is especially plastic in early life and remains plastic through out life which provides the mechanism for learning. In his article he quotes Dr. Eliot's comment, "What we are learning through neuroscience is that each different part of the brain carries on a different cognitive function, whether it's perception, movement, emotion, language, or memory.

Each has a developmental time table. Brain development, like all development is a blend of nature and nurture, of genes and environment. Genes prescribe the overall architecture and sequence of brain maturation, but the environment acts at every step to modify those genetic decisions. While plasticity declines in adulthood it does continue. This is how adults continue to learn." There are many theories regarding the study of the brain, brain plasticity, and brain recovery. No one disputes that the human brain is more plastic in early life however new learning occurs through adulthood. (Murray 2003)

Issue II Opinions and Conclusions

Discussion and Perspective

The clarity and objectivity presented by Dr. Eliot discussed above is worthy of repeating. "While plasticity declines in adulthood it does continue. This is how adults continue to learn." Compare that statement to the Le Goff report on Michelle and Natalie which states, "According to Rogers: 'There maybe a plasticity to development early in life in children with autism which may be somewhat unique among the more severe developmental disabilities and which may indicate a critical period of intervention (italics added by LeGoff). The impact of the absence of appropriate services in the time period of 1994-1999 for each of the girls is difficult to quantify, but is likely to be significant and far-reaching" (italics added by the author).

First Rogers is quoted as saying there *maybe plasticity* to development early in life in children with autism which *may* indicate a critical period. LeGoff's quotation of Rogers is out of context for he was speculating in using the term "maybe" and "may". Rogers was speculating not stating a scientific fact. LeGoff uses the quote as if it were a fact. LeGoff's claim is grounded more in belief and emotional rhetoric verses scientific fact. The notion of "critical period *of intervention*" is not supported by scientific fact. There is no evidence that learning stops for children, adolescents, adults or persons in their senior years. The argument that puts forward the notion that because the brain is more plastic in early life than adulthood would mean that learning stops, is prevented or damaged if it didn't take place prior to age two or four or six or even eight is speculation and based on eliciting an emotional, "isn't it awful" response from the reader. First there is not universal agreement or understanding on how the brain develops for normal children and what are the parameters or time frames for plasticity in normal children. Not all aspects of the brain develop at the same time or rate. Science hasn't resolved that for normal children let alone children with developmental delays, autism or neurological disorders. The comment in LeGoff's report about the future impact on development of Natalie and Michelle because of "the absence of appropriate services" from 1994-99 is in the view of the author, grossly overstated and highly speculative. What is significant is that the girls are making progress today, are making gains in behavior, communication and in social skills. That in itself refutes the concept of "significant and far reaching" damage.

Based on decades of work with disabled children as well as available research, the fact is that the benefits of appropriate instruction are not time sensitive to the degree that appropriate instruction is no longer of benefit or doesn't impact the child in a positive way if it is started after the child is 18 months, 48 months, 60 months or 10 years of age.

If there was any substantial scientific evidence for that contention the IDEA would have a 0-7 age mandate not a 3-21 mandate. For what would be the sense of special education beyond age seven? If instruction wasn't effective and of benefit to the development of disabled children after the preschool years why would IDEA mandate services to age 21? The LeGoff claim would have the reader believe that plasticity so defines the brain development of autistic children that if the child doesn't get just the right kind of environmental stimulus at just the right time the children are doomed to life long consequences. That is a preposterous view.

Children as well as adults are subjects of trauma leading to brain injury, strokes and similar disabling conditions long after preschool years and these individuals still benefit from instruction targeted to address their needs. In the case of Michelle and Natalie both children are involved with special education programming that is evidently judged by those familiar with the girls as addressing their needs. They are said to be benefiting from this instruction. They are progressing. That is clear in the records. Because they didn't receive a particular method of treatment in a particular timeframe does not mean that their future development is limited or irrevocably damaged for nowhere is there definitive evidence to support such a claim. There are a countless number of individuals with autism who have not had the advantage of early intervention programs and as a result of facilitated communication, auditory training, or any other number of interventions that were not provided until late in life are now in college or leading productive life's that contribute to society.

This author first learned about ABA from a professional who had never worked with anyone below the age of 15. ABA was used to help teenage and adult clients overcome physically dangerous ritualistic behaviors. Skinner's theory on the laws of behavior are universal, not a function of the age of the individual. It is based on the idea that learning is a function of change in overt behavior. The science can be applied equally and effectively regardless of the age of the individual.

The argument that lack of "appropriate services" during the preschool age for Natalie and Michelle results in permanent, irrevocable damage to these girls because of brain plasticity and critical periods defies current brain research about learning and development. The argument is emotionally based verses factually based and is without merit.

Factual Summary

Issue III:

Did failure to follow technical procedures under IDEA constitute or result in irrevocable harm to Natalie & Michelle?

The proposal put forward is that because the school system failed to follow technical procedures detailed in IDEA that Natalie and Michelle were harmed to the extent that the errors or omissions actually damaged the children irrevocably. This statement seems to emanate from the reports provided by Barbara Bateman Ph.D., J.D. of 1/29/01 and her report of 6/20/03.

The Bateman report of 1/20/01 detailed twenty one deficiencies in the IEP documents developed for Michelle from 1994 to 1999. She identified thirteen deficiencies in IEP documents developed for Natalie from 1995 through 1999. A review of these reported deficiencies is offered.

IEP document deficiencies identified by Bateman for Michelle that relate specifically to inappropriate technical; procedures 1994 -1999 are:

- (1994) Extent of participation in regular education program not sufficiently described.
- (1997) Inappropriate description of participation in regular education.
- (1997) No meaningful reasons given on placement choice.
- (1997) Objectives largely repeats from earlier, failed IEPs with no additional or different services added.
- (1997) Failure to state service to meet need-No evidence it was provided.
- (1998) Nature of regular education participation inadequately described
- (1/99) Nature of regular education participation inadequately described
- (1/99) Inadequate reasons for placement decisions.
- (12/99) No reasons given for placement decision.

Other deficiencies identified in the Bateman report that are judgmental and border on procedural technical deficiencies are:

- (1994) Doubtful that the placement (self contained special education preschool class) offered "language filled environment."
- (1997) Failure to address critical areas in the PLOP...wandering off if not placed in rifton chair.
- (1/99) Note dated 5/4/98 indicates a discussion was held about behavioral interventions for tantruming. However, IEP does not contain a behavior intervention plan.

IEP document deficiencies identified by Bateman for Natalie that relate specifically to inappropriate technical; procedures 1995-1999 are:

- (2/97) Speech therapy reduced to 40 minutes a week with no explanation.
- (2/97) It is insufficient to say "mainstreamed for all appropriate school related activities." – too vague and non specific, non-enforceable and cannot be monitored.
- (2/97) Insufficient reasons given for placement decision.
- (2/98) No evidence of parental participation.
- (2/99) Regular education participation not adequately specified.
- (2/99) Placement rationale inadequate.

Other deficiencies identified in the Bateman report that are somewhat judgmental and border on technical deficiencies are:

- (7/95) IEP states not eligible for ESY, a finding inconsistent with PLOP. It does indicate the question will be readdressed during the school year.
- (2/99) How does one skip, hop, jump and gallop with 80% accuracy?

Issue III Opinions and Conclusions **Discussion and Perspective**

The central notion of this allegation is that the procedural errors in the IEP were so egregious and so profound that harm was done to the children. One can not determine if the harm that was done was a result of one item detailed above or a collection of a couple of items that were particularly offensive or the collective weight of all of the items that was the cause of the harm and damage to the students. If it was one item that was "the mother of all" technical deficiencies we do not know what that item was. If it was a collection of items we do not know which group is the offending group. The reader can not tell from review of Bateman's list or the decision and order by Jeanne B. Comer just which deficiency or group of deficiencies is the cause of this harm. One could assume, given the decision of the hearing officer and order that these procedural and technical deficiencies needed to be erased. Given that order and the compliance to that order by the school system we might assume that these errors have been eliminated and as a result these technical violations are no longer harming the children.

Presently the girls are receiving what is reported in the records to be appropriate services. Given that, one would then assume that current services as reflected in the present IEPs are appropriate and no longer constructed to be harmful or damaging to the children and that there is no longer a contention that the present IEPs are technically deficient. From that you would surmise that they are in-fact appropriate and without procedural errors. When one looks at the IEPs currently in place then one would expect that the goals and objectives are measurable and commitment of special education services are defined as per the information in the Present Level of Educational Performance (PLEOP). If we look at the present IEPs for Michelle and Natalie one would expect to see documents that are technically accurate and evidence procedural compliance with IDEA. As reports indicate there is no allegation that the children are continuing to be harmed by the structure of the IEPs that have been in place since the decision and order was rendered on January 31, 2000. So upon review of the present IEP documents the author anticipated that they

would be markedly different from the IEPs previous to the due process hearing and regarded as harmful.

Some of the most evident IEP deficiencies for Michelle that relate specifically to inappropriate technical; procedures 2001-2004 are:

- 11/08/01 (section 21. SERVICES) under Supplementary aides and services is inadequate. Failure to commit resources such as life skills curriculum and touch math curriculum, visual cues, visual schedule, social stories, token program, structured play times, that include amount, frequency, duration and location that were indicated as a need in the present level of educational performance
- 11/08/01 (section 26. MEETING NOTES) indicate commitment of needed services that are not allocated in (section 21. SERVICES) nor is there evidence of an annual goal and objectives for water safety. Section 26 is provided for the purpose of follow-up issues or points of clarification not commitment of service.
- 11/08/01 Measurable Annual Goal "Michelle will demonstrate simple shopping skills in the community" is not measurable.
- 11/15/02, 09/11/02 (section 21. SERVICES) under Supplementary aides and services is inadequate. Failure to commit resources visual cues, visual schedule, social stories, that include amount, frequency, duration and location that were indicated as a need in the present level of educational performance. The PLOEP fails to address whether the supplemental aides and services mentioned in the 2001 PLOEP such as touch math and structured play times are still needed.
- 11/06/03 (section 21. SERVICES) under Supplementary aides and services is inadequate. Failure to commit resources such as calculator, visual cues, visual schedule, and PECs system, that include amount, frequency, duration and location that were indicated as a need in the present level of educational performance
- 11/06/03 obsessive tendencies are reported yet no mention of how those issues are being addressed is evident anywhere in the IEP

Some of the most evident IEP deficiencies for Natalie that relate specifically to inappropriate technical; procedures 2002-2004 are:

- 01/31/02 Evidence that addresses meeting the standard for ESY is absent. Nothing in PLOEP details justification for ESY services.
- 01/31/02 (section 23) Placement justification relative to regular or special education placement not specific
- 1/13/03 PLOEP indicates frequency of behavior difficulties as decreasing over the last year. However the 1/31/02 PLOEP indicated there was no concern related to behavioral issues. Behavior is not addressed.

The review of the IEPs in place since the due process hearing have similar technical deficiencies to what was in place prior to the hearing. No one is presently alleging these technical errors are present, that these errors are harming the children or that they are worthy of any notice at all. The above discussion serves to highlight the reality of the IEP document for these children as well as millions of disabled children throughout the country. The IEP is a document that, in the author's experience, many if not most teachers and other educators find frustrating and difficult to write, difficult to explain and often cumbersome and confusing to parents. There are no universal standards that all states, public schools, teacher training institutions or even courts or legislatures follow or universally accept. The federal mandates and myriad of state interpretations of these mandates were not developed by practicing teachers. When IEP documents are reviewed because of a complaint or because of some inadequacy they are not reviewed by practicing classroom teachers. Further the requirements or interpretations of what is appropriate at any one time changes almost monthly as one court or another decides or rules on an issue under their jurisdiction. These rulings are viewed by educational administrators at the federal level then by each respective state educational agency. Each ruling is interpreted in the context of that state's practices and modified accordingly. How educational practitioners in Hawaii views the adequacy of an objective in an IEP, or a placement justification statement in an IEP might be different from how a Wisconsin, or New York official might view that document.

Having said that does not imply that there are no standards, no reasonably expected models to appropriately draft IEPs or judge their technical accuracy. The IEP is the document that constitutes a free appropriate public education (FAPE) for a child identified with a disability under IDEA. The development of this document has procedural requirements that are intended to provide evidence that FAPE is ensured for a child with a disability. However, even for someone not familiar with IDEA or the jargon of special education IEPs it is difficult to accept the notion that Natalie was permanently harmed and damaged because the school did not define the criteria for jumping or hopping. Similarly it is difficult to conceptualize that Michelle was permanently harmed or that she received irrevocable damage because the school system didn't provide adequate wording to justify placement in special education, regular classes, or that something stated in the present level of performance wasn't appropriately addressed in objectives put forward in the IEP. If those issues are judged to have harmed these children then one could argue that every IEP for every child in every school is harmful. Such an allegation defies logic, common sense and is without merit.

Comparison of Pre IEPs and Current IEPs:

Reports provided after the due process hearing in January of 2000 indicate that the girls have received appropriate services, have appropriate IEPs in place and are reported to be making progress. If progress is actually taking place as reported we might find evidence of progress being different today than what was evident prior to the due process decision on January 31, 2000. Given their disabilities, developmental activities, pre/readiness skills, academic skills one might expect to see some significant differences in these areas now that services and programming is deemed appropriate. However review of ISFP and

IEPs from 1994- 2004 indicate that rates of progress appears to be similar. The girls continue to have significant difficulty with the characteristics associated with autism, communication, generalization and independent application of skills learned. This appears to be consistent with much of the research cited above and the experiences of the author cited above. However there is evidence that the girls know more of how to do math, matching, and reading. That can reasonably be expected to take place after six years of instruction. However, it doesn't appear from reviewing the present levels of performance statements on the IEPs that they have learned to apply what they have learned to do and most of what they have learned to do is not at an independent level. Need for prompting, reminders, repetition for maintenance of skills is still major IEP elements in the IEPs post 2000 just as they were in IEPs previous to 2000.

Most significantly in reference to a detailed review of the IEPs provided for the two girls indicate that the school did not error in their analysis of identifying the target areas of need for these children. The IEP goals and service provisions, the target for services to these children address the same or similar skills, deficiencies, areas of instruction today as they did previous to 2000. That is extremely significant. The difference in the IEPs prior to 2000 and since 2000 is that they have progressively gotten more precise in taking a skill area and specifying it as a goal with a defined target that is easier to demonstrate progress from grading period to grading period. This enables the school to more precisely define, quantify and document progress and enables the parent to observe that progress more clearly and with supporting evidence. It's not different areas of instruction that are the focus of the IEPs since 2000 but the breaking down of the global task that specifically defines what is expected to be accomplished. Interestingly enough the girl's progress is still reported as progress not mastered for the majority of the annual goals and short term objectives.

Summary and Conclusions

A central concept in this case is that both Natalie and Michelle have been harmed and that they have been permanently damaged because their IEPs evidenced procedural errors, the amount and intensity of services was inadequate and appropriate methodology was not provided during a specific timeframe that alleges optimal learning.

This document attempts to address the key elements of whether Natalie and Michelle were permanently damaged because the school system failed to provide appropriate services through the provision of a particular methodology, timeliness of the methodology and intensity of that methodology to address the student's disabilities related to autism between the years or 1994 through 1999. The claim is that if the girls had been recipients of such treatments they would potentially recover from autism. In addition because the school system failed to provide these services during their early years the girls were permanently damaged because some of the critical years when brain plasticity occurs were lost and this is not recoverable. Finally the girls were permanently harmed because the IEPs for both children between the years of 1994 through 1999 had procedural technical errors that denied FAPE and caused permanent and irrevocable damage to these children.

- **Methodology:** This report presents a rather extensive testimony that there is no cure for autism. The claims of "recovery" are not valid for large portions of the population. While structured behavioral programming is regarded as an effective educational practice and benefits many children it is not a cure. Further the benefits of this programming is not the same for all autistic children, is not always the most effective strategy based on the unique characteristics of a particular child, and is not exclusive to children with autism.
- **Time sensitivity of treatment and brain plasticity:** The most powerful argument relating to this issue is that Michelle and Natalie are currently doing well, gaining skills, and are making progress on their IEP goals. Their development has not stopped because a particular strategy was not employed when they were 18 months, 36 months, 48 months, 60 months or some similar time frame. Brain plasticity theory is an outgrowth of the nature nurture theory. Given that discussion and the theory the girls were nurtured; their brains were not deprived. The words of Dr. Eliot are again worth repeating, "While plasticity declines in adulthood it does continue. That's how we learn." That's how Natalie and Michelle are learning. The services in place since 2000 are regarded as best practice, comprehensive and exemplary. The services are described as addressing the needs of these children and these services are evidencing progress. In reality the services detailed on IEPs before and after the due process hearing are not significantly different in reference to goal content and commitment of service.

- Procedural technical IEP errors: The argument that technical IEP errors in the IEPs of Michelle and Natalie during the year's 1994 through 1999 permanently damaged these girls is not supported by the facts. The girls are making progress. Comparisons of the IEPs from 1994 through 2004 indicated that target areas of need have been appropriately identified from the beginning. The goals and objectives were much broader and therefore quantifying what progress looked like was different then from what it looks like now. A close analysis of the documents indicates that the rate of progress and success remains similar. Frankly the notion that the girls were permanently harmed because the school did not define how to measure hopping, or didn't explain with enough detail or with the exact legally justifiable wording why they were or not involved in a regular or special education class is without conceivable merit. In reality the same kinds of errors could be sighted in the present IEPs as was sighted in previous documents yet the present IEPs are now viewed as appropriate and offering exemplary programming. The point is that given the complexity of the IEP document, the thousands of interpretations in this country of what is and what is not a good objective, measurement statement, justification of placement statement or similar IEP requirement virtually all IEPs could be judged to be harmful to every disabled child in the country. Clearly that is not the intent of IDEA.

Respectfully Submitted
Joan M. Hawkinson

Qualifications

The above report constitutes my opinions and position on the issues under consideration regarding Michelle and Natalie Horsley and their education as provided by the school system of Hawaii. My opinion and conclusion is based on review of the documents detailed above. As of the date of this report I have not had an opportunity to observe the girls or view the video referred to in Dr. LeGoff's report.

Education:

- *Specialist Degree Special Education Administration and Supervision, University of Wisconsin, Superior Campus, 2000
- *Masters of Science in Education-Lesley College, Boston MA. 1990
- *BS degree Special Education -University of Wisconsin Whitewater Campus

Publications and Appearances:

- *Wisconsin Association of School Business Officials (WASBO), Transportation Issues in Special Education- 2004 annual WASBO conference
- *Special Education and Aggressive Children-Methods and Techniques: Presentation Philips Schools August 2003
- *Best Practices-Use of Seclusionary Time Out & Physical Restraint with Physically Aggressive Students: Presentation to Conference of Administrators of Special Education, March 2004
- *Education and Health Care Services: Lorman Conference Madison, WI., April 2002, & October 2003
- *Special Education Plan in Wisconsin, Review of State and Federal Legal References: Presentation Council of Administrators of Special Education Annual Conference, May 2002
- *Special Education Law and Practices Eligibility-IEP: Eau Claire Wisconsin, Jan. 2002
- *Behavioral/Autism Diagnosis and Treatment Practices: Presentation CESA 5 School Districts 1998, 1999, 2000, 2001, 2002, 2003, 2004.

Consultations and Independent Educational Evaluations:

- *CESA 5 Multi-Handicapped/ Behavioral/Autism Educational Program Evaluations 1989-Present
- *Iola-Scandinavia School District, Behavioral/Autism Consultant 1996-2004
- *Wautoma Area School District, Behavioral/Autism Consultant 1996-2004
- *Montello Area School District; Behavioral/Autism Consultant 1996-2004
- *Chilton School District Behavioral/Autism Consultant 1996-2004
- *Williams Bay School District Behavioral/Autism Consultant 1998
- *CESA 6 Behavioral/Autism Consultant 1999-2001
- *Wisconsin Dells School District Behavioral/Autism Consultant 1999
- *Phillips School District Behavioral/Autism Consultant 1998
- *Peshtigo School District Behavioral/Autism Consultant 2003
- *Marinette School District : System Evaluation of Special Education Programs, Delivery of services, Staffing, Budget and Procedures, 2003-2004

*Stevens Point area School District, Multi Handicapped, Behavioral/Autism Consultant
2001-2004

Expert Witness:

- *Mauston School District 1996- IDEA Eligibility verses Section 504
- *Wisconsin Dells School District 1998-IDEA Eligibility- autism, serious emotional disturbance- appropriate programming
- *Williams Bay Schools, 1997-IDEA, LRE Appropriate Program for Student with Autism
- *Marinette Schools, 2003- Appropriate Educational Program and Service Arrangements for Seriously Emotionally Disturbed Children

Positions and Appointments:

- ED,CD,LD Teacher Wautoma Area Schools
- CD,LD,ED Teacher Westfield Area Schools
- Special Education Program Support Teacher CESA 5
- Special Education Program Services Coordinator CESA 5
- Assistant Director Special Education CESA 5
- Associate Director of Special Education CESA 5
- Autism Consultant CESA 5
- Adjunct Professor Silver Lake College
- Adjunct Professor UW Whitewater
- Senior Trainer Non Violent Crisis Intervention-National Institute for Crisis Prevention

Awards:

- Outstanding Educator Award - Wisconsin Council of Administrators of Special Education 2004 - For significant contributions to the education of children with autism.
- Outstanding Achievement Award – Wautoma Area School District 2004 - In appreciation for the many contributions to the families and teachers of disabled children in the Wautoma Area School District.

Summary Statement:

My first experience with individuals with disabilities dates back to when I was sixteen years old as a volunteer in a light assembly workshop and recreational facility for teenagers and adults with developmental disabilities. After years of training, experience and practice with children with disabilities in all handicapping conditions I am presently employed as the Associate Director of Special education in CESA 5. This position relies on the 25 plus years of experience I have gained in teaching, diagnosis, in-service and program development for individuals identified under IDEA as having a Severe Emotional Disturbance, Cognitive Disability, Autism, and low incident disabilities. After a number of years of successfully teaching children with multiple disabilities I was selected to become a program support teacher, then promoted to program services coordinator for severely involved, behaviorally disabled, cognitively disabled and autistic children. My expertise in service to significantly disabled children and the assistance provided to parents of disabled

children became recognized throughout the central part of the state of Wisconsin. My skills in programming for significantly disabled children, particularly children with severe autism, children with severe multiple disabilities, and children with chronic and severe emotional disturbance has been recognized by schools through out the state, as well as parents of these children. As a result my expertise has been sought as a consultant to develop programs in particular for children with autism. I continue in this endeavor to this day.

Fee Schedule

My fee for services is \$100.00 per hour plus expenses. My fees do not include any travel time. I only bill for the time on site and case preparation. Thank you for considering me.

References

- Bryson, S.E., Rogers, S.J., Fombonne, E., (2003) Autism spectrum disorders: early detection, intervention, education psychopharmacological management. *Can J Psychiatry* 48: 506-516.
- Burrows, K., (2004) Early intervention for children with autism. *J Paediatrics & Child Health*. 9(4): 267-270
- Boyd RD, Corley MJ. (2001) Outcome survey of early intensive behavioral intervention for children with autism in a community setting. *Autism*. 5(4):430-441
- Gabriels, R., Hill, D., Pierce, R., Rogers, S. J., & Wehner, B., (2001) Predictors of treatment outcome in children with autism. *Autism: The International J. Research and Practice*, 5 (4), 407-229.
- Green, G. (1995) "Early Intervention for Children with Autism: the Need for Intensive Behavioral Analytic Treatment, New England Center for Children", Southborough, MA.
- Lovaas, O.I. (1981) Teaching developmentally disabled children. The ME book. Austin, TX: ProEd.
- Lovaas, O.I. (1987) Behavioral treatment and normal educational and intellectual functioning of young autistic children. *J Consulting and Clinical Psychology*, 55,3-9.
- Ludwig S, Harstall C. Intensive intervention programs for children with autism. Edmonton: Alberta Heritage Foundation for Medical Research (AHFMR), 2001:40. Available at: <http://www.ahfmr.ab.ca/publications.html>.
- Murray B. (2003) Understanding brain development and early learning: New research better informs the nature vs. nurture issue. FACSNET Biotechnology. Available at: http://www.facsnet.org/tools/sci_tech/biotek/eliot.php

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Publications and Appearances:

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